



Nearly Two Decades of

## Real World Experience







# Explore Real World Data

Select a section to view  $\longrightarrow$ 

## **Smart Depth™ Technology**

Smart Deoth Technology

NovaSure Smart Depth<sup>™</sup> technology gives Healthcare Professionals the confidence to perform safe and effective endometrial ablations – for every patient.



### **NovaSure®**

Nearly Two Decades of Real World Experience

## Quick

Average treatment time 90 seconds<sup>1</sup>

## Safe

1:25,000 risk of perforation<sup>2</sup>

## **Effective**

92.8% patient satisfaction<sup>3</sup>

## Proven

80 peer reviewed publications



Smart Depth™ Technology

C-section

Post Ablation scarring / cancer

Larger & Irregular Cavities

Re-Intervention

Post ablation pain

Younger Women

NovaSure vs. LNG-IUS

NovaSure + LNG-IUS

Adenomyosis

Hysterectomy

## **Smart Depth™ Technology**

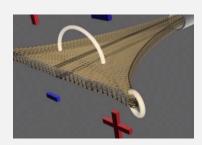




**Nova** Profe

endo

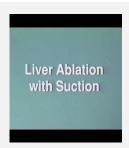
## **Smart Depth™ Technology benefits**





## **Smart**

The technology continuously monitors and measures tissue impedance and calculates the optimal power level required for the treatment of the cavity - based on uterine size.





## **Unique**

Our unique Moisture Transport® fluid removal system provides constant tissue contact with the array through integrated suction while simultaneously removing steam, blood, and other by-products.





## Safe

The Cavity Integrity
Assessment (CIA) is a builtin safety test that confirms
uterine cavity integrity, giving
you the confidence to perform
a safe and effective ablation
for every patient.

oth

ĵУ

ion cancer

regular

ntion

on pain

lomen.

vs. LNG-IUS

+ LNG-IUS

osis

Discov

## **Smart Depth™ Technology**





**Nova** Profe

endo

What do NICE recommend for Endometrial Ablation?

**Recommendation:** 

When selecting a second generation technique, providers should select 1 that is expected to deliver outcomes at least equivalent to those from radiofrequency endometrial ablation.

### The Evidence:

The evidence from the network meta-analysis favoured radiofrequency endometrial ablation as a preferential second generation endometrial ablation technique for the outcomes of blood loss and satisfaction.

The committee agreed that when selecting a second generation technique, providers should select 1 that is expected to deliver outcomes at least equivalent to those from radiofrequency endometrial ablation.<sup>(4)</sup>

oth

JУ

on

cancer

regular

ntion

on pain

lomen.

vs. LNG-IUS

+ LNG-IUS

osis

Discov

## NovaSure with Previous C-sections

## Clinical question...

Do I need to measure the myometrial thickness prior to treating with NovaSure for patients who have had a previous or multiple lower segment caesarean section?

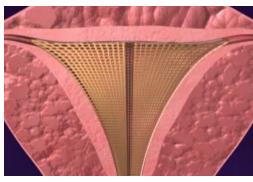
### Answer...

No need to scan the myometrial thickness prior to treating patients with NovaSure (1)

## Resources

The NovaSure® Radio Frequency technology, tapers the depth of ablation of the uterine cavity to ensure sufficient penetration into the myometrium for consistent results.

Click on a video below to watch how NovaSure technology works



Video 1 Ablation



Video 2 Side Section



#### Fact

NOT contra-indicated to treat patients with multiple previous C-sections(1)

NOTE: NovaSure is contra-indicated for patients with previous classical caesarean



## **Evidence**

Radiofrequency Endometrial Ablation in Patients With a History of Low Transverse Caesarean Delivery.

AUTHOR:

Adkins RT. Bressman PL. Bressman PB, et al

PUBLICATION:

J Minim Invasive Gynecol. 2013 Nov-Dec;20(6):848-52

Read more





Smart-Depth™ Technology

#### C-section

Post Ablation scarring / cancer

Larger & Irregular Cavities

Re-Intervention

Post ablation pain

Younger Women

NovaSure vs. LNG-IUS

NovaSure + LNG-IUS

Adenomyosis

Hysterectomy

## **NovaSure with previous C-sections**



Di Ni Se

A No wi



Res



## **Evidence**

Radiofrequency Endometrial
Ablation in Patients with a History of
Low Transverse Caesarean Delivery.

AUTHOR:

Adkins RT, Bressman PL, Bressman PB, et al PUBLICATION:

J Minim Invasive Gynecol. 2013 Nov-Dec;20(6):848-52

## **Objective:**

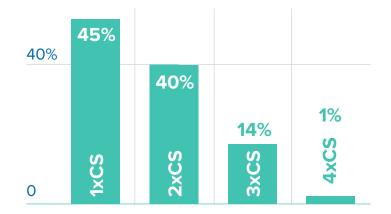
Compare 100 patients who had previous low transverse caesarean delivery with 94 patients with previous vaginal births who had a previous radiofrequency ablation performed.

## **Key Findings:**

The NovaSure proactive Cavity Integrity Assessment Test detected incomplete healing of a Caesarean Section scar and avoided any complications. The ablation procedure was not performed, and the patient was discharged.

NO perforations were reported.

## Number of caesarean deliveries (CS):



## Conclusion

The efficacy and safety of endometrial ablation are comparable in women with or without a history of caesarean delivery.

oth™

ion cancer

regular

ntion

on pain

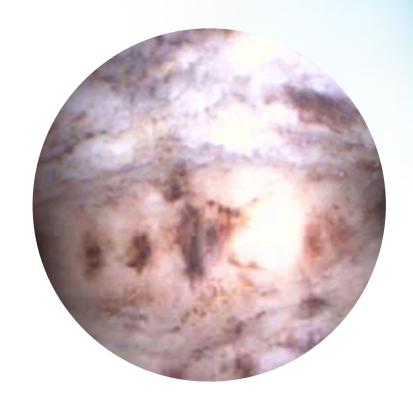
lomen.

vs. LNG-IUS

+ LNG-IUS

osis

## **Re-accessing the Cavity** & Cancer Detection Post Ablation



NovaSure provides **effective** results whilst not increasing risk or delaying diagnosis of cancer



## **Evidence**

Is endometrial ablation protective against endometrial cancer? A retrospective observational study

AUTHOR:

Singh M, Hosni MM, Jones S

PUBLICATION:

Gynecology and Obs (2016); May; 293(5):1033-7

Read more



The Issue of Scarring Post-Ablation: The Data.

AUTHOR:

Lukes, AS, Evantash EG

PUBLICATION:

Contemp OB/GYN. 2012 Nov.(Suppl):1-3

Read more



Endometrial cancer after endometrial ablation vs. medical management of abnormal uterine bleeding

AUTHOR:

Dood R L, Gracia C R, Sammel M D et al

PUBLICATION:

Journal of Minimally Invasive Gynecology. 2014 Sep-Oct; 21(5): 744-752

Read more





Smart-Depth™ Technology

C-section

**Post Ablation** scarring / cancer

Larger & Irregular Cavities

Re-Intervention

Post ablation pain

Younger Women

NovaSure vs. LNG-IUS

NovaSure + LNG-IUS

Adenomyosis

Hysterectomy

## **Re-accessing the Cavity**

## & Cancer Detection Post Ablation



## **Evidence**

Is endometrial ablation protective against endometrial cancer?

A retrospective observational study

AUTHOR:

Singh M, Hosni MM, Jones S PUBLICATION:

Gynecology and Obs (2016); May; 293(5):1033-7

## **Objective:**

Evaluate the potential risk of endometrial ablation masking the presence or delay the diagnosis of endometrial cancer.

### **Methods:**

A retrospective observational study was conducted at Bradford Teaching Hospitals. The study included all women who had different types of endometrial ablative procedures in the period of January 1994 to December 2011.

#### Results:

Over 18 years period, 1521 women had endometrial ablative procedures for dysfunctional uterine bleeding. During their long-term follow-up, none of the women developed endometrial cancer later in life. This incidence is much lower than the lifetime risk of endometrial cancer in the general population (RR 0.0135; 95% CI 0.0007 -0.2801; P=0.0054).

## Conclusion

This is the largest study to examine the long-term incidence of endometrial cancer in women who had endometrial ablative procedures. It shows that the development of endometrial cancer does not seem to be associated with endometrial ablative procedures.

oth' 'y

> tion cancer

regular

ntion

on pain

**V**omen

vs. LNG-IUS

+ LNG-IUS

DSIS

## **Re-accessing the Cavity**

## & Cancer Detection Post Ablation



## **Evidence**

## The issue of Scarring Post-Ablation: The data

AUTHOR:

PUBLICATION:

Lukes. AS. Evantash EG

Contemp OB/GYN. 2012 Nov. (Suppl):1-3

(Sup

#### **Objective:**

To address concerns around scarring post-ablation by reviewing published scientific literature.

#### **Findings:**

Re-intervention Post Global Endometrial Ablation (GEA):

- Main indications include bleeding, pain, or both
- Hysterectomy rates for GEA range from 2-21%
- Hysterectomy rates for NovaSure specifically range from 2-9.8%

#### **Evaluating the Cavity Post GEA:**

 There is no published data that demonstrates any difference in post-ablation scarring between the different types of GEA

#### devices.

 Evaluation methods include: Endometrial Sampling, TVUS, SIS, Hysteroscopy, MRI

#### **Endometrial Cancer After GEA:**

 Retrospective studies have shown that no long-term increased incidence of endometrial cancer exists for women with previous endometrial ablation.

## Conclusion

The need for re-intervention after GEA is very low.

- Evaluating the cavity post ablation, in most cases this can be done successfully.
- Based on available data, there is no increased incidence of endometrial cancer or evidence of masking to delay diagnosis in patients who have had an endometrial ablation.

oth Iy

> tion cancer

regular

ntion

on pain

/omen

vs. LNG-IUS

+ LNG-IUS

25

## **Re-accessing the Cavity**

## & Cancer Detection Post Ablation



## **Evidence**

Endometrial cancer after endometrial ablation vs. medical management of abnormal uterine bleeding.

AUTHOR:

Dood RL, Gracia C R, Sammel M D et al PUBLICATION:

Journal of Minimally Invasive Gynecology. 2014 sept-Oct; 21 (5): 744-752

#### **Objective:**

To compare whether endometrial ablation is associated with increased risk or delayed diagnosis of endometrial cancer compared to medical management of abnormal uterine bleeding.

#### **Methods:**

- Multi centred retrospective
- cohort study 495 outpatient general practitioner practices in the UK
- Cohort included women >25 years with AUB diagnosed between 1994-2010
- Interventions used endometrial ablation, medical management or both

## **Results:**

234,721 women met study inclusion in total

4776 underwent endometrial ablation

229,945 received medical management

- ▶ During a median observation period of 4.07 years, endometrial cancer developed in 3 women in the ablation group and 601 in the medical management group (ablation hazard ratio, 0.45; 95% confidence interval, 0.15-1.40; p5.17)
- ▶ Median time to diagnosis 237 days ablation group / 299 days in the medical management group

## Conclusion

No difference was observed in endometrial cancer rates and there was no delay in diagnosis when comparing endometrial ablation vs. medical management

oth' Iy

> tion cancer

regular

ntion

on pain

/omen

vs. LNG-IUS

+ LNG-IUS

osis

## Novasure with Larger Cavity Size and Submucosal Fibroids

## NovaSure has the capability to safely and effectively treat a range of different cavity sizes

## **Treating Larger Cavities:**

The NovaSure device array can be adjusted up to 6.5cm in length and is able to treat larger cavities. The device sheath is capable of reaching up to 12cm sound length\* (to reach fundus).(1)





## **Evidence**

Evaluation of NovaSure Endometrial Ablation in Women with Uterine Sounding Lengths >10cm

AUTHOR:

Thiel JA, Briggs MM, Pohlman S et al

PUBLICATION:

J Obstet Gynaecol Can. 2014 Jun;36(6):491-497

Read more



## **Evidence**

Use of the NovaSure Impedance Controlled Endometrial Ablation System in Patients with Intracavitary disease: 12-month follow-up results of a prospective, single-arm clinical study

AUTHOR:

Sabbah R. Desauiniers G.

PUBLICATION:

The Journal of Minimally Invasive Gynecology 2006;13:467-471

Read more



Smart-Depth<sup>™</sup> Technology

C-section

Post Ablation scarring / cancer

Larger & Irregular Cavities

Re-Intervention

Post ablation pain

Younger Women

NovaSure vs. LNG-IUS

NovaSure + LNG-IUS

Adenomyosis

Hysterectomy

<sup>\*</sup> NovaSure instructions for use. Precautions: The safety and effectiveness of the NovaSure system has not been fully evaluated in patients with a uterine sound measurement greater than 10cm

## Novasure with Larger Cavity Size and Submucosal Fibroids



## Nova effec

The up larg

(to

## **Evidence**

Evaluation of NovaSure Endometrial Ablation in Women with Uterine Sounding Lengths >10cm

AUTHOR:

Thiel JA, Briggs MM, Pohlman S et al PUBLICATION:

J Obstet Gynaecol Can. 2014 Jun;36(6):491-497

#### **Objective:**

Evaluate procedure outcomes and adverse events in women with uterine sounding lengths >10cm who underwent a NovaSure® endometrial procedure.

#### Method:

- 188 premenopausal women with a history of menorrhagia
- 87 procedures with a uterine sounding length >10cm
- 101 controls with a uterine sounding length ≤10cm
- Retrospective case-control study

#### **Outcomes:**

- The case and controls were similar for age, 44  $\pm$  6.0 vs 43.3  $\pm$  5.5 years respectively
- Body mass index (BMI) was significantly greater in the cases (30.2  $\pm$  7.4) compared to the controls (27.5  $\pm$  6.8)
- No adverse events were reported from either group
- There was a reduction to either light bleeding, spotting, or amenorrhoea in 86% of the cases and 93% of the controls

#### Conclusion

These retrospective results show improvement in bleeding with no serious adverse events in women with uterine sounding lengths >10cm who underwent a NovaSure endometrial ablation procedure.

Use of the NovaSure Impedance Controlled Endometrial Ablation System in Patients with Intracavitary disease: 12-month follow-up results of a prospective, single-arm clinical study

AUTHOR:

PUBLICATION:

Sabbah R. Desauiniers G.

The Journal of Minimally Invasive Gynecology

2006:13:467-471

#### Study methods and populations:

65 women with menometrorrhagia with confirmed (type I and II) submucous myomas up to 3cm with and without polyps. Patients were not pre-treated and the procedure was not timed to the menstrual cycle.

#### **Outcomes:**

Twelve-month results demonstrated that the NovaSure System was effective in reducing excessive uterine blood loss, success (defined as reduction to normal bleeding) was observed in:

- Reduction to normal bleeding 95% of patients
- · Amenorrhoea 69% of patients
- · No intraoperative or postoperative adverse events reported
- · 95% patient satisfaction

#### **Conclusion**

Clinical results of this study demonstrate that the NovaSure System is safe and effective in treatment of patients with menometrorrhagia caused by intracavitary disease up to 3cm. Jy ——

> ion cancer

rregular

ntion

on pain

**l**omen

vs. LNG-IUS

+ LNG-IUS

sis

ectomy

Read IIIore

## **Novasure Long Term Results** and Re-Intervention



86%

of women avoided a hysterectomy after 10 years following a NovaSure Procedure<sup>(5)</sup>



## **Evidence**

#### **AFTER 5 YEARS**

## **UK** experience:

Bipolar Radiofrequency Compared with Thermal Balloon Ablation in the office A Randomized Controlled Trial

AUTHOR:

Smith PP, Malick S, Clark JT

PUBLICATION:

Obstet Gynecol. 2014 Aug,124 (2pt t):219-25

#### **German experience:**

An impedance-controlled system for endometrial ablation: five-year follow-up of 107 patients

AUTHOR:

Gallinat A.

PUBLICATION:

J Reprod Med. 2007;52(6):467-472

#### **AFTER 10 YEARS**

#### **Dutch experience:**

Ten-year follow-up of a randomised trial comparing bipolar endometrial ablation with balloon ablation for heavy menstrual bleeding.

AUTHOR:

Herman MC, Penninx JP, Mol BW, Bongers MY

PUBLICATION:

BJOG 203 Jul;120(8):966-70

Read all case studies



Smart-Depth<sup>™</sup> Technology

C-section

Post Ablation scarring / cancer

Larger & Irregular Cavities

#### Re-Intervention

Post ablation pain

Younger Women

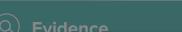
NovaSure vs. LNG-IUS

NovaSure + LNG-IUS

Adenomyosis

Hysterectomy

## **Novasure Long Term Results** and Re-Intervention





## **Evidence**

#### **AFTER 5 YEARS**

#### **UK** experience:

**Bipolar Radiofrequency Compared with Thermal** Balloon Ablation in the office A Randomized **Controlled Trial** 

AUTHOR:

PUBLICATION:

Smith PP, Malick S, Clark JT

Obstet Gynecol. 2014 Aug,124 (2pt t):219-25



amenorrhoea



+ spotting



bleeding Follow up



avoidance of hysterectomy



requested surgical re-intervention (3 patients)\*



#### \*Patient symptoms:

- 1. Cyclical pelvic pain
- 2. Offensive watery vaginal discharge
- 3. Persistent heavy menstrual bleeding

#### **German experience:**

An impedance-controlled system for endometrial ablation: five-year follow-up of 107 patients

AUTHOR:

PUBLICATION:

Gallinat A.

J Reprod Med. 2007;52(6): 467-472





97%

avoidance of

hysterectomy







requested surgical

follow up cohort of 103 patients

re-intervention (3 patients)\*\*

#### \*\*Patient symptoms:

- 1. Hematometra
- 2. Symptomatic myoma
- 3. Menometrorrhagia

#### **AFTER 10 YEARS**

#### **Dutch experience:**

Ten-year follow-up of a randomised trial comparing bipolar endometrial ablation with balloon ablation for heavy menstrual bleeding

AUTHOR:

PUBLICATION:

Herman MC.

BJOG 203 Jul;120(8):

Penninx JP. Mol BW. 966-70 Bongers MY







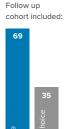






90%

requested surgical re-intervention (10 patients)



## Patient symptoms:

- 1. Dysmenorrhoea (n=1)
- 2. Cyclic abdominal pain due to hematometra from cervical stenosis (n=1)
- 3. Atypia of the endometrium (n=1)
- 4. Abdominal pain (n=1)
- 5. Myoma nascens (n=1)
- 6. Persistent heavy menstrual bleeding (n=5)

on

cancer

rregular

ention

ion pain

Vomen

vs. LNG-IUS

+ LNG-IUS

osis

## **Post Ablation Pain**

## Novo**Sure**®

Smart-Depth<sup>™</sup> Technology

C-section

Post Ablation scarring / cancer

Larger & Irregular
Cavities

Re-Intervention

### Post ablation pain

Younger Women

NovaSure vs. LNG-IUS

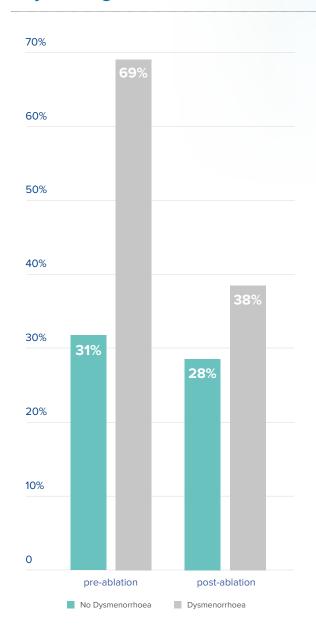
NovaSure + LNG-IUS

Adenomyosis

Hysterectomy

Contact

## **Key Findings** (6)



< 1%

Incidence of PATSS and/or hematometra (6)

**7**%

New dysmenorrhoea post-ablation is uncommon with only 3/44 (7%)<sup>(7)</sup>

50%

Nearly 50% of women with pre-ablation pain/dysmenorrhoea can expect to see resolution of pain (7)

## **Potential Causes**

- PATSS and Hematometra
- Previous tubal occlusion
- Previous tubal ligation
- Contracture or synechiae at the cornua area post-ablation
- Occlusion of the upper endocervical canal

## (Q) Evidence

Effect of Radiofrequency Endometrial Ablation on Dysmenorrhoea.

AUTHOR:

Wyatt SN, Banahan T Tang Y, et al.l

PUBLICATION:

J Minim Invasive Gynecol. 2016 Nov - Dec;23(7):1163-1166.

Read more >

## **Post Ablation Pain**



Key

70%

60%

50%

40%

30%

20%

10%

**Evidence** 

Effect of Radiofrequency endometrial Ablation on Dysmenorrhoea.

AUTHOR:

Wyatt SN, Banahan T Tang Y, et al.l PUBLICATION:

J Minim Invasive Gynecol. 2016 Nov - Dec;23(7):1163-1166.

## **Objective:**

Determine rates of dysmenorrhoea after NovaSure in patients with pre-ablation dysmenorrhoea and in patients without pre-ablation dysmenorrhoea

#### **Methods:**

Retrospective cohort study with diverse patient population

- 100 patients with pre-ablation dysmenorrhoea (69%)
- 44 patients without preablation dysmenorrhoea (31%)

#### **Results:**

**38%** experienced dysmenorrhoea after ablation (55% improvement)

New dysmenorrhoea post-ablation is uncommon with only 3/44 (7%)

**Nearly 50%** of women with pre-ablation pain/dysmenorrhoea can expect to see resolution of pain

oth IY

> ion cancer

regular

ntion

ion pain

Vomen

vs. LNG-IUS

+ LNG-IUS

osis

ectomy

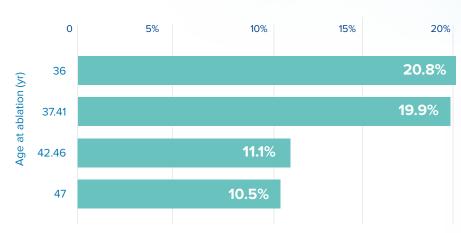
0

## **NovaSure for Younger Women**

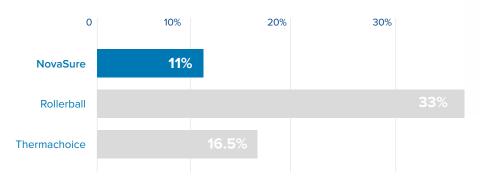
NovaSure® provides effective results for women of all ages and avoids the risks and costs associated with hysterectomy

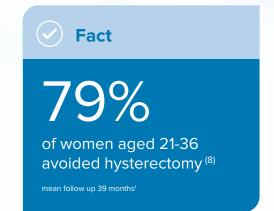
## **Key Findings** (8)

Rate of hysterectomy subsequent to endometrial ablation stratified by age at ablation



#### Types of ablation









Smart-Depth<sup>™</sup> Technology

C-section

Post Ablation scarring / cancer

Larger & Irregular Cavities

Re-Intervention

Post ablation pain

Younger Women

NovaSure vs. LNG-IUS

NovaSure + LNG-IUS

Adenomyosis

Hysterectomy

## **NovaSure for Younger Women**



Nov

Key

Rate of by ag

Age at ablation (yr)

Types

Nov

Ro

**Evidence** 

Hysterectomy Subsequent to Endometrial Ablation

AUTHOR:

Shavell VI, Diamond MP, Senter JP, et al PUBLICATION:

J Minim Invasive Gynecol. 2012 Jul-Aug;19(4):459-64

#### **Objective:**

To estimate the incidence of and factors associated with hysterectomy subsequent to endometrial ablation

#### **Methods:**

A retrospective cohort study evaluated 1169 women who underwent an endometrial ablation between Jan 2003 and June 2010 with a minimum follow up of 9 months.

#### **Results:**

**13.4**% of women underwent a hysterectomy subsequent to an endometrial ablation

## Conclusion

With a mean follow up of 39 months, younger women had an increased likelihood of hysterectomy. Rate and time of hysterectomy was associated with type of ablation performed.

oth<sup>™</sup> Iy

> ion cancer

regular

ntion

on pain

Vomen

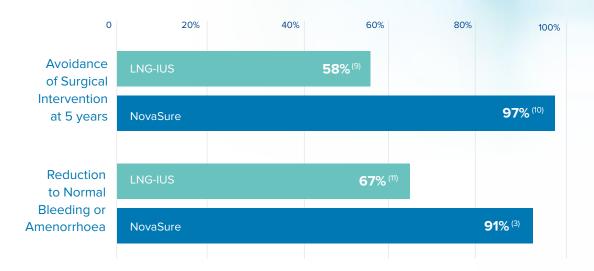
vs. LNG-IUS

+ LNG-IUS

osis

## Patient choice for HMB: **NovaSure® compared to LNG-IUS**

#### LNG-IUS Effectiveness vs. NovaSure



Women who discontinued use of LNG-IUS



bleeding9



reported Heavy bleeding9



LNG-IUS at 2 years<sup>12</sup>

30%

Hormonal side effects included depression, acne, headache and weight gain 13

**Additional** benefits of NovaSure include:



dsymenorrhea3



**Patient Choice** 

77%

of patients wish they had been offered Endometrial Ablation at their first doctors visit (14)



#### **Guidelines**

#### **Heavy Menstrual Bleeding Guidelines NG88 2018**

The National Institute of Clinical Excellence recommends that healthcare professionals advise every woman with HMB about the treatments that are right for her, with a clear focus on the woman's choice.

Read more



## **Evidence**

Women's preferences for the levonorgestrel intrauterine system versus endometrial ablation for heavy menstrual bleeding

AUTHOR:

van den Brink MJ. Beelen P. Herman MC, et al.

PUBLICATION:

Eur J Obstet Gynecol Reprod Biol. 2018 Sep;228:143-147

Read more



 $Smart-Depth^{TM}$ Technology

C-section

Post Ablation scarring / cancer

Larger & Irregular Cavities

Re-Intervention

Post ablation pain

Younger Women

NovaSure vs. LNG-IUS

NovaSure + LNG-IUS

Adenomyosis

Hysterectomy

## Patient choice for HMB: NovaSure® compared to I NG-IUS





LNG

Avo

Rec to N Bleed Ameno

Inter

Wome

Addition of Nove

## **Evidence**

Women's preference for the levenorgestrel intrauterine system vs. endometrial ablation for heavy menstrual bleeding.

AUTHOR:

van den Brink MJ, Beelen P, Herman MC. et al PUBLICATION:

Eur J Obstet Gynecol Reprod Biol . 2018 Sep;228: 143-147

## **Objective:**

Women's preferences for treatment of heavy menstrual bleeding (HMB) are important in clinical decision-making. Our aim was to investigate whether women with HMB have a preference for treatment characteristics of the levonorgestrel intrauterine system (LNG-IUS) or endometrial ablation and to assess the relative importance of these characteristics

#### **Method:**

A discrete choice experiment was performed in general practices and gynaecology outpatient clinics in the Netherlands. Women with HMB were asked to choose between hypothetical profiles containing characteristics of LNG-IUS or endometrial ablation

#### **Characteristics included:**

Choice	Treatment A	Treatment B
Procedure performed by gynaecologist or general practitioner	General Practitioner	Gynaecologist
Reversibility of procedure	Yes	No
Probability of dysmenorrhoea	1%	10%
Probability of irregular bleeding	15%	0%
Additional use of contraception	No	
Need to repeat the procedure after five years	Yes	No
Treatment containing hormones	Yes	No

oth

ion cancer

regular

ntion

on pain

**V**omen

vs. LNG-IUS

+ LNG-IUS

osis

ectomy

dsymenorrhea

Read more

## Patient choice for HMB: NovaSure® compared to I NG-IUS





LNG

## **Evidence (continued)**

Avo of S Inter

165 women completed the questionnaire

to Blee Amend (22%) patients were recruited from general practices

Wom

of LN

129 (78%) patients were recruited from Gyracoslasty system. from Gynaecology outpatient clinics.

The characteristic found most important was whether a treatment contains hormones

- ▶ Women preferred a treatment without hormones, a treatment with the least side effects, and no need for a repeat procedure or additional contraception.
- Women completing the questionnaire at the Gynaecology outpatient clinic differed from women in primary care in their preference for a definitive treatment to be performed by a gynaecologist.

Addition of Nov

## Conclusion

Whether or not a treatment contains hormones was the most important characteristic influencing patient treatment choice for HMB. Participants preferred characteristics that were mostly related to endometrial ablation, but were willing to trade-off between characteristics

cancer

regular

ntion

on pain

**l**omen

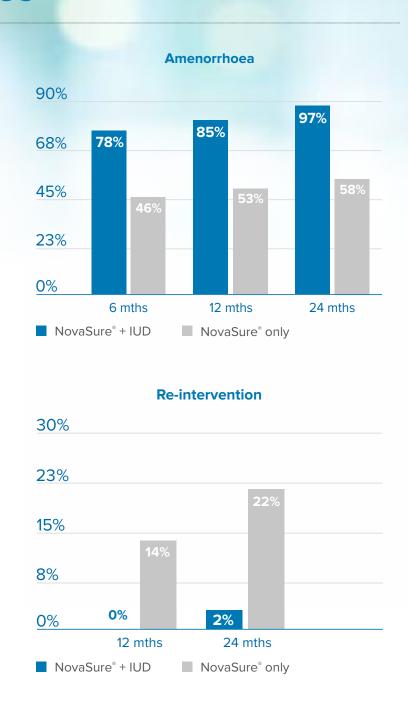
vs. LNG-IUS

LNG-IUS

## **NovaSure combined with LNG-IUS**

Combining use of NovaSure with LNG-IUS has shown to be more effective in achieving amenorrhoea, alleviating dysmenorrhoea and reducing re-interventions







Smart-Depth<sup>™</sup> Technology

C-section

Post Ablation scarring / cancer

Larger & Irregular Cavities

Re-Intervention

Post ablation pain

Younger Women

NovaSure vs. LNG-IUS

NovaSure + LNG-IUS

Adenomyosis

Hysterectomy

## **NovaSure combined with LNG-IUS**



Con LNC effe alle red

Con radi end intra radi

AUT Zho

in w

J Мі 12. р

## **Evidence**

Comparison of combined bipolar radiofrequency impedance-controlled endometrial ablation with levonorgestrel intrauterine system versus bipolar radiofrequency endometrial ablation alone in women with abnormal uterine bleeding

AUTHOR:

Zhao H, Yang B, Feng L;

PUBLICATION:

J Minim Invasive Gynecol. 2019 Jun 12. pii: S1553-4650(19)30265-1

#### **Objective:**

et al

To evaluate the efficacy of the combination of bipolar radiofrequency impedancecontrolled endometrial ablation (NovaSure\*) and levonorgestrel intrauterine system (LNG-IUS, Mirena) placement in comparison with NovaSure\* endometrial ablation alone in patients with abnormal uterine bleeding (AUB).

#### Method:

Retrospective study of 246 women (1:1 match established yielding 41 patients in each group) treated with NovaSure alone or NovaSure\* with immediate IUD placement from 2013-2016.

#### Design:

A retrospective propensity score matching study

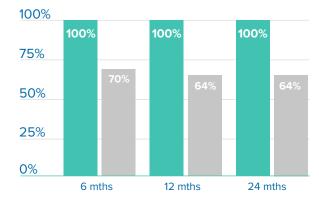
#### **Setting:**

Beijing Tiantan Hospital, Capital Medical University, Beijing, China

#### **Results:**

Follow- up results for patients with combined NovaSure® + IUD vs. NovaSure® alone:

#### Dysmenorrhoea



■ NovaSure® + IUD ■ NovaSure® only

## Conclusion

For women with AUB, the combination of NovaSure® endometrial ablation and LNG-IUS is more effective than NovaSure® alone in achieving amenorrhoea, alleviating dysmenorrhoea and reducing re-interventions

ly ——

ion cancer

regular

ntion

on pain

**V**omen

vs. LNG-IUS

+ LNG-IUS

sis

ectomy

12 mths

24 mths

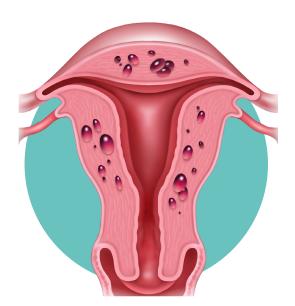
## **NovaSure for patients with Adenomyosis**

## **Effective treatment**

NovaSure is effective in the treatment of painful and hemorrhagic symptoms associated with adenomyosis in both the short and long term.

However, efficacy in controlling bleeding seems to decrease over time.

Nevertheless, it appears to be a good alternative to hysterectomy in this indication, especially in patients close to menopause (15).



92%

of patients were satisfied with the NovaSure procedure (15)

56%

of patients who had hysterectomy remained satisfied by NovaSure<sup>(15)</sup>

**(!**)

 $\textbf{Note:} \ \ \textbf{The presence of adenomyosis cannot reliably predict GEA failure}^{\text{16}}$ 



## **Evidence**

Evaluation of NovaSure global endometrial ablation in symptomatic adenomyosis:
A longitudinal study with a 36 month follow-up

AUTHOR:

Philip CA, Le Mitouard M, Maillet L; et al

PUBLICATION:

Eur J Obstet Gynecol Reprod Biol. 2018 Aug; 227:46-51

Read more



## **Evidence**

Effects of undiagnosed deep adenomyosis after failed NovaSure endometrial ablation.

AUTHOR:

Mengerink BB, van der Wurff AAM, ter Haar JF, et al.

PUBLICATION:

JMIG. 2015;22(2):239-244.

Read more



Smart-Depth<sup>™</sup> Technology

C-section

Post Ablation scarring / cancer

Larger & Irregular Cavities

Re-Intervention

Post ablation pain

Younger Women

NovaSure vs. LNG-IUS

NovaSure + LNG-IUS

Adenomyosis

Hysterectomy

## **NovaSure for patients with Adenomyosis**



Effe

Novas

Howe

Neve

**Evidence** 

Evaluation of NovaSure® global endometrial ablation in symptomatic adenomyosis: A longitudinal study with a 36 month follow-up

PUBLICATION:

AUTHOR:

1002201120

Philip CA, Le Mitouard M, Eur J Obstet Gynecol Reprod Biol.

Maillet L; et al. 2018 Aug;227:46-51

**Objective:** 

To evaluate the efficacy of NovaSure  $^{\tiny \odot}$  radiofrequency global endometrial ablation (GEA) in adenomyosis.

#### Design:

A monocentric longitudinal cohort (Lyon, France).

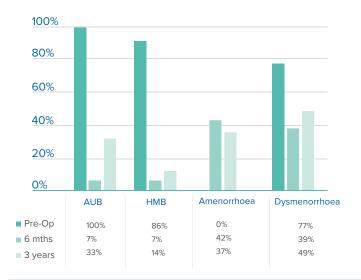
Inclusion criteria were symptomatic adenomyosis resistant to drug therapy (dysmenorrhoea and abnormal uterine bleeding (AUB)), for whom Novasure® GEA was considered.

The diagnosis of adenomyosis was based on ultrasound and/or MRI criteria.

A questionnaire evaluating the symptoms was proposed to each patient before GEA and postoperatively at 6 months and 3 years.

#### **Results:**

- A significant decrease of dysmenorrhoea was observed with an improvement in 20 patients (60.6%) at 6 months and 17 patients (51.5%) at 3 years.
- 8 patients (19%) had a hysterectomy during the study.
- · Patients were 92% satisfied with the procedure.
- No major postoperative complication was reported after using NovaSure.



## **Conclusion**

NovaSure® is effective in the treatment of painful and hemorrhagic symptoms associated with adenomyosis in both the short and long term. However, efficacy in controlling bleeding seems to decrease over time. Nevertheless, it appears to be a good alternative to hysterectomy in this indication, especially in patients close to menopause.

oth<sup>™</sup> Iy

> ion cancer

regular

ntion

on pain

**V**omen

vs. LNG-IUS

+ LNG-IUS

osis

## **NovaSure for patients with Adenomyosis**



Effe

Novas

Howe

Neve

**Evidence** 

Effect of undiagnosed deep adenomyosis after failed NovaSure endometrial ablation.

AUTHOR:

Mengerink BB, van der Wurff AAM, ter Haar JF, et al. PUBLICATION:

JMIG. 2015;22(2):239-244.

**Objective:** 

Determine the prevalence of adenomyosis and deep adenomyosis after NovaSure endometrial ablation in hysterectomy specimens after NovaSure endometrial ablation failure.

#### Design:

- Prospective observational study in the Netherlands
- Women who underwent hysterectomy for menorrhagia and/or dysmenorrhoea after failure of NovaSure – between 2007-2011
- Compared to women underwent hysterectomy between Jan 2005
   April 2009

213

patients underwent NovaSure 22 failed (10%) 45% had adenomyosis

173

patients control group with hysterectomy 43% had adenomyosis

Deep adenomyosis (>2.5mm endometrial penetration)

▶ 41% of NovaSure failures

▶ 21% of control group

## Conclusion

Deep adenomyosis after failed NovaSure endometrial ablation was present in a significant number of patients. It is not clear whether adenomyosis is induced by endometrial ablation or whether it causes endometrial ablation failure.

oth<sup>™</sup> IY

ion

cancer

regular

ntion

on pain

**V**omen

vs. LNG-IUS

+ LNG-IUS

osis

ectomy

Note: The presence of adenomyosis cannot reliably predict GEA failure 15

Read more

## NovaSure vs. Hysterectomy

## Offering NovaSure in outpatients further reduces costs and risks whilst maintaining results

#### **Cost Effective**

- Endometrial ablation performed under general anaesthesia The initial cost of endometrial destruction is lower than that of hysterectomy but, because retreatment is often necessary\*, the cost difference narrows over time (17).
- Endometrial ablation performed under local anaesthesia can provide further cost benefits.

\*82%-91%

fewer interventions / re-intervention with NovaSure versus hysterectomy (18)

## Recovery

Hysterectomy is associated with a longer operating time and recovery period (17)

### **Patient Satisfaction**

81%

97%

NovaSure at 10 years (4)

Hysterectomy at 12 years (19)

1:25,000 risk of perforation with NovaSure(2)

## Complications (17,20)

Most adverse events, both major and minor, were more likely after hysterectomy with minor complications up to 7% and major up to 4% (21)

#### Pre-discharge:

- Ureter damage 1:100 (22)
- Sepsis
- Blood transfusion (more common with laparoscopic vs. vaginal hysterectomy)
- Pyrexia
- · Vault and wound haematoma

#### Post-discharge:

Infection rates ranging from:

- 10.5% abdominal, 13% vaginal, 9% laparoscopic (20)
- 5% NovaSure (23)
- Venous thromboembolism 1% 12% (20)
- Injury to GU Tract 1-2%, GI Tract 0.1-1% (20)

#### Longer term:

Pelvic floor repair 5% by 30 years (24)

Salpingo-oophorectomy



Read more about Endometrial Ablation vs. Hysterectomy





Smart-Depth<sup>™</sup> Technology

C-section

Post Ablation scarring / cancer

Larger & Irregular Cavities

Re-Intervention

Post ablation pain

Younger Women

NovaSure vs. LNG-IUS

NovaSure + LNG-IUS

Adenomyosis

Hysterectomy

## NovaSure vs. Hysterectomy



Off

mai

**Evidence** 

Cos

• End The

COS

• End

\*8

Rec

Hyste time a

Pati

Nov

1:25

**Endometrial Ablation vs. Hysterectomy** 

	Abdominal Hysterectomy	Vaginal Hysterectomy	Laparoscopic Hysterectomy	Endometrial Ablation
Length of Stay	3-7 days <sup>(25)</sup>	<1-4 days <sup>(26)</sup>	<1-2 days <sup>(26)</sup>	<24 hours <sup>(27)</sup>
Return to Normal Activity	6-8 weeks <sup>(28)</sup>	3-6 weeks <sup>(29)</sup>	3-6 weeks <sup>(29)</sup>	24 hours <sup>(27)</sup>
Laparotmy Incision	Yes	No	No	No
Laparoscopic Incision	No	No	Yes	No

oth<sup>™</sup>

ion

cancer

regular

ntion

on pain

**V**omen

vs. LNG-IUS

+ LNG-IUS

osis

## NovaSure vs. Hysterectomy



ion

cancer

regular

ntion

on pain

**V**omen

vs. LNG-IUS

+ LNG-IUS



## mai

## Cos

• End The

hys cos

• End

\*8

Rec

Hyste time a

Pati

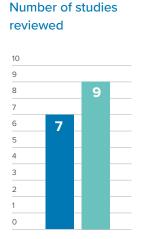
No

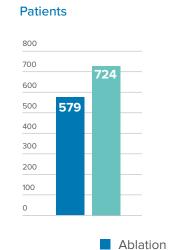
1:25

## **Evidence (continued)**

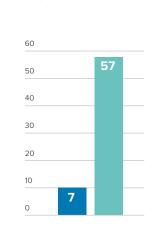
**Endometrial Ablation vs. Hysterectomy** 

**Adverse Events** 

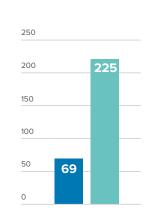




**Total Number of** 



**Major Complications** 



**Minor Complications** 

"While hysterectomy is the most effective tretment for AUB, it carries the highest risk for adverse events" (29)

Hysterectomy

ectomy

osis

## If your patient meets the following criteria...

- HMB impacts on quality of life
- Completed childbearing
- Does not wish to have hormones
- Preference to retain her uterus
- Alternative contraception
- Offer her NovaSure

## **Get It Right First Time** with Nova**Sure**®

**REDUCE** re-intervention and avoid hysterectomy

**REDUCE** burden on theatres

**REDUCE** adverse events

**INCREASE** patient satisfaction

**INCREASE** referrals

## For more information, please visit:

- novasure.co.uk
- gynsurgicalsolutions.com



#### or email us at:

ukgynsurgical@hologic.com

Back to contents

Please refer to the full operating instructions for the NovaSure Controller and Disposable Device, as well as any warnings, contraindications, and safety information.



## **All references**

- 1. NovaSure Instructions for Use. https://gynsurgicalsolutions.com/wp-content/uploads/2019/06/AW-09898-001\_009\_01\_NovaSure\_ADVANCED\_device.pdf last accessed Jan 2020
- 2. Wortman M. Endometrial ablation: past, present, and future. Part II. Surg Technol Int. 2018 Nov 11;33:161-177.
- 3. Cooper J, Gimpelson R, Laberge P, et al. A randomized, multicenter trial of safety and efficacy of the Novasure System in the treatment of menorrhagia. J Am Assoc Gynecol Laparosc. 2002; 9:418-428
- 4. NICE Heavy Menstrual Bleeding Guidelines Ng88; https://www.nice.org.uk/guidance/ng88
- 5. Herman MC, Penninx JP, Mol BW, Bongers MY; Ten-year follow-up of a randomised controlled trial comparing bipolar endometrial ablation with balloon ablation for heavy menstrual bleeding; BJOG 2013 Jul;120(8):966-70
- 6. Gimpelson RJ. Ten-year literature review of global endometrial ablation with the NovaSureR device. Int J Womens Health. 2014 Mar 11;6:269-80
- 7. Wyatt SN, Banahan T, Tang Y, et al. Effect of Radiofrequency Endometrial Ablation on Dysmenorrhoea. J Minim Invasive Gynecol. 2016 Nov Dec;23(7):1163-1166.
- 8. Shavell VI, Diamond MP, Senter JP, et al. Hysterectomy Subsequent to Endometrial Ablation. J Minim Invasive Gynecol. 2012 Jul-Aug; 19(4): 459-64
- 9. Hurskainen R, Teperi J, Rissanen P, et al. Clinical outcomes and costs with the levonorgestrel-releasing intrauterine system of hysterectomy for treatment of menorrhagia: randomized trial 5-year follow-up. JAMA 2004:291:1456-1463
- 10. Gallinat A. An impedance-controlled system for endometrial ablation: Five-year follow up on 107 patients. J Reprod Med. 2007; 52:467-472
- 11. Istre O, et al. Treatment of menorrhagia with levonorgestrel intrauterine system versus endometrial resection. Fertil Steril. 2001;76:304-309;
- 12. Gupta J, Kai J, Middleton L, Pattison H, Gray R, Daniels J, et al. Levonorgestrel intrauterine system versus medical therapy for menorrhagia. N Engl J Med. 2013;368(2):128-137.
- 13. Mirena [package insert]. Wayne, NJ: Bayer HealthCare Pharmaceuticals Inc.; 2007.
- 14. Hologic, Data on File. In the Know Patient Survey. 2007.
- 15. Philip CA, Le Mitouard M, Maillet L; et al. Evaluation of NovaSure® global endometrial ablation in symptomatic adenomyosis: A longitudinal study with a 36 month follow-up. Eur J Obstet Gynecol Reprod Biol. 2018 Aug;227:46-51
- 16. El-Nashar SA, Hopkins MR, Creedon DJ, et al. Prediction of treatment outcomes after global endometrial ablation. Obstet Gynecol. 2009; 113(1):97-106.
- 17. Endometrial resection and ablation versus hysterectomy for heavy menstrual bleeding. AUTHOR: Fergusson R.J., Lethaby A, Shepperd S; et al. Cochrane Database Syst Rev. 2013 Nov 29;(11):CD000329
- 18. Cost effectiveness of endometrial ablation with the NovaSure(\*) system versus other global ablation modalities and hysterectomy for treatment of abnormal uterine bleeding: US commercial and Medicaid payer perspectives. Miller JD1, Lenhart GM1, Bonafede MM1, et. Al Int J Womens Health. 2015 Jan 6;7:59-73.
- 19. Laparoscopic supracervical hysterectomy compared with second-generation endometrial ablation for heavy menstrual bleeding: the HEALTH RCT Cooper K1, Breeman S2, Scott NW3, et al. Health Technol Assess. 2019 Sep;23(53):1-108.
- 20. Complications of hysterectomy. Clarke-Pearson DL1, Geller EJ. Obstet Gynecol. 2013 Mar;121(3):654-73
- 21. Vaginal and Laparoscopic hysterectomy as an outpatient procedure: A systematic review. Dedden SJ1, Geomini PMAJ2, Huirne JAF3, et. Al. Eur J Obstet Gynecol Reprod Biol. 2017 Sep;216:212-223.
- 22. https://www.nhs.uk/conditions/hysterectomy/risks/
- 23. Bipolar Radiofrequency Compared With Thermal Balloon Ablation in the Office A Randomized Controlled Trial. Smith PP, Malick S, Clark JT. Obstet Gynecol. 2014 Aug;124 (2 Pt 1):219-25
- 24. Incidence of pelvic floor repair after hysterectomy, Blandon R.E., Bharucha A.E., Melton J.L, et al. Am J Obstet Gynecol. 2007 Dec; 197(6): 664.e1-664.e7.
- 25. Warren L, Ladapo JA, Borah BJ, Gunnarsson CL. Open abdominal versus laparoscopic and vaginal hysterectomy: Analysis of a large United States payer measuring quality and cost of care. J Minim Invasive Gynecol. 2009;16(5):581-588
- 26. Weinberg L, Rao S, Escobar PF. Robotic surgery in gynecology: An updated systematic review. Obstet Gynecol Int. 2011;2011:852061.
- 27. Sanders BH. Endometrial ablation for menorrhagia: Will this procedure become a mainstay of treatment? Can Fam Physician. 1992;38:157-160.
- 28. Falcone T, Paraiso MF, Mascha E. Prospective randomized clinical trial of laparoscopically assisted vaginal hysterectomy versus total abdominal hysterectomy. Am J Obstet Gynecol. 1999;180(4):955-962.
- 29. Matteson KA, Abed H, Wheeler TL 2nd, Sung VW, Rahn DD, Schaffer JI, et al. A systematic review comparing hysterectomy with less invasive treatments for abnormal uterine bleeding. J Minim Invasive Gynecol.

Please refe warnings, c om